

**To:** Stanislaus, Mathy[Stanislaus.Mathy@epa.gov]  
**Cc:** Breen, Barry[Breen.Barry@epa.gov]; Natarajan, Nitin[Natarajan.Nitin@epa.gov]; Breen, Barry[Breen.Barry@epa.gov]; Tulis, Dana[Tulis.Dana@epa.gov]; Woolford, James[Woolford.James@epa.gov]  
**From:** Cheatham, Reggie  
**Sent:** Tue 8/11/2015 2:22:09 PM  
**Subject:** Approach to Sediments at Golden Mine

Mathy

With tremendous coordination with OSRTI, we think this is close to what you are looking for:

### **Approach for Sediment Monitoring in the Aftermath of the 2015 Gold King Mine Blowout**

The EPA *Contaminated Sediment Remediation Guidance for Hazardous Waste Sites* (EPA-540-R-05-012, OSWER 9355.0-85, 2005) was developed to provide technical and policy guidance for project managers and management teams making remedy decisions for contaminated sediment sites. Although this guidance is predominantly used in the Superfund remedial program, it provides relevant information applicable to the development of an approach for sediment monitoring in the aftermath of the emergency response associated with the Gold King Mine blowout. The guidance outlines several key questions that should be considered for a sediment monitoring program that focus on its purpose, sampling and analysis details, temporal and spatial domains for the sampling, trigger levels for action or termination of the program, and communication of the results with the public. EPA will build upon previous data (i.e., baseline conditions) and existing sampling efforts in the impacted river system (Animas and San Juan Rivers) to develop a scientifically-based adaptive approach for future monitoring of the ecosystem status or recovery. The monitoring plan will describe the sampling of sediment and water throughout the system and may include focused biological sampling efforts, where appropriate. The comparison of the monitoring results to pre-incident data will be a critical determinant for decision making.

Of note: "...adaptive approach for future monitoring." This is meant to describe that all ongoing and planned sampling will be modified as necessary based on empirical results, comparison with indicators/trigger levels, regulatory requirements, and new knowledge that is gained from independent sources. This is a similar approach that was described for the Deepwater Horizon long term monitoring plan we developed under the Operational Science Advisory Team in the UAC-New Orleans.

Thanks

Reggie Cheatham, Acting Director  
Office of Emergency Management, USEPA  
202.564.8003 (O); 202.689.9400 (M);  
cheatham.reggie@epa.gov